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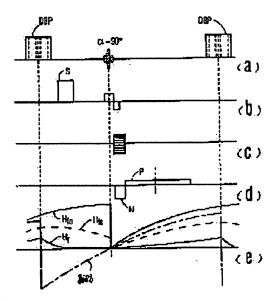
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## (54) METHOD AND APPARATUS FOR MAGNETIC RESONANCE

## (57)Abstract:

PURPOSE: To attempt optimization of selective inversion or suppression of fat by a constitution that has MTC effect.

CONSTITUTION: A magnetic resonance method repeatedly subjects an inspection region to a sequence so constructed that the same PF pulse acting in fat-suppression method in the sequence is selective to fat, or that it induces substantial magnetization transfer contrast. A design parameter is provided to correspond to 1-2-1-binary RF pulse (BP) and 1-2-1-2-1-double binary RF pulse (DBP) having a zero-degree pure flip angle at Larmor frequency of a water proton and a nominal 180-degree pure flip angle at Larmor frequency of fat bond proton. Each of these RF pulse designs is



executed by pulse having phase alternation from zero to 180 degree during a period wherein a substantially rectangular sub-pulse in amplitude is formed.

## **LEGAL STATUS**



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